

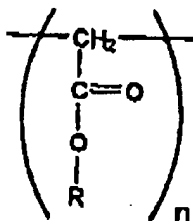
IN THE CLAIMS

Please amend the claims as follows:

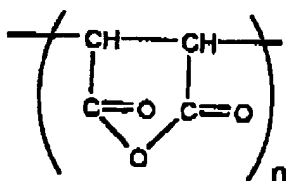
1. (Canceled)

2. (Currently Amended) The gel electrolyte according to claim + 17, wherein a ~~structure~~ the carboxyl moiety containing monomer is expressed by a chemical formula 1 and/or a chemical formula 2 shown below (here, R indicates any one selected from the group consisting H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>3</sub>H<sub>7</sub>, C<sub>4</sub>H<sub>9</sub>, and C<sub>5</sub>H<sub>11</sub>) ~~is introduced into said copolymer.~~

[Chemical Formula 1]



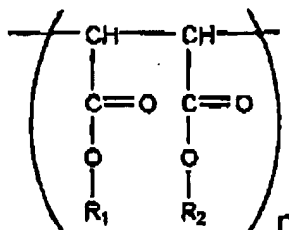
[Chemical Formula 2]



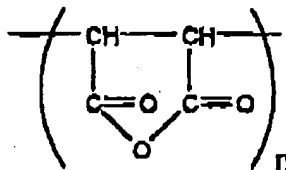
3. (Currently Amended) The gel electrolyte according to claim + 12, wherein a ~~structure indicated~~ the carboxyl moiety containing monomer is expressed by a chemical formula 3 and/or a chemical formula 4 shown below (here, R<sub>1</sub> and R<sub>2</sub> respectively designate

any one selected from the group consisting of H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>3</sub>H<sub>7</sub>, C<sub>4</sub>H<sub>9</sub>, and C<sub>6</sub>H<sub>11</sub>) is introduced into said copolymer.

[Chemical Formula 3]



[Chemical Formula 4]



4. (Currently Amended) The gel electrolyte according to claim + 17, wherein ~~said copolymer the carboxyl moiety containing monomer unit includes at least one kind of~~ material is selected from the group consisting of maleic acid, ester maleate and maleic anhydride ~~as a monomer unit and at least one kind of structure selected from structures~~ obtained by esterifying a part or all of the carboxyl group ~~or the carboxylic acid or the anhydride structure is introduced into said copolymer.~~

5. (Currently Amended) The gel electrolyte according to claim + 17, wherein at ~~least one kind of material selected from the group consisting of the ester maleic acid, the~~

~~maleate and the maleic anhydride~~ the vinylidene fluoride is polymerized with ~~vinylidene fluoride so as to locate the~~ carboxyl moiety containing monomer unit ratio with a relative to vinylidene fluoride ratio within a range of 25/10000 to 30/1000.

6. (Canceled)

7. (Currently Amended) The gel electrolyte according to claim + 17, wherein molecular weight of said ~~copolymer~~ carboxyl moiety containing monomer ranges from 0.8 d/g to 3.0 d/g on the basis of an intrinsic viscosity notation.

8. (Canceled)

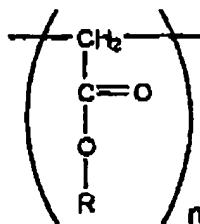
9. (Currently Amended) The nonaqueous electrolyte battery according to claim 8 18, wherein said anode includes at least one kind of carbon material selected from the group consisting of lithium metal, lithium alloy and a carbon material capable of being doped/dedoped with lithium.

10. (Currently Amended) The nonaqueous electrolyte battery according to claim 8 18, wherein said cathode includes a composite oxide consisted of lithium and transition metals.

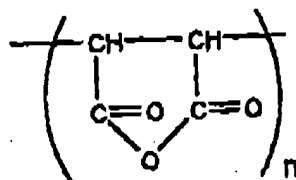
11. (Currently Amended) The nonaqueous electrolyte battery according to claim 8 18, wherein ~~a structure~~ the carboxyl moiety containing monomer is expressed by a chemical formula 5 and/or a chemical formula 6 shown below (here, R indicates any one selected from

the group consisting of H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>3</sub>H<sub>7</sub>, C<sub>4</sub>H<sub>9</sub>, and C<sub>8</sub>H<sub>17</sub> is introduced into said copolymer.

[Chemical Formula 5]

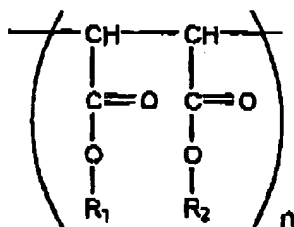


[Chemical Formula 6]

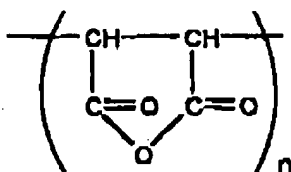


12. (Currently Amended) The nonaqueous electrolyte battery according to claim 8, 18 wherein ~~structure indicated~~ the carboxyl moiety containing monomer is expressed by a chemical formula 7 and/or a chemical formula 8 shown below (here, R<sub>1</sub> and R<sub>2</sub> respectively designate any one selected from the group consisting of H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>3</sub>H<sub>7</sub>, C<sub>4</sub>H<sub>9</sub>, and C<sub>5</sub>H<sub>11</sub>) is introduced into said copolymer.

[Chemical Formula 7]



[Chemical Formula 8]



13. (Currently Amended) The nonaqueous electrolyte battery according to claim 12, 18, wherein said copolymer the carboxyl moiety containing monomer unit includes at least one kind of material is selected from the group consisting of maleic acid, ester maleate and maleic anhydride as a monomer unit and at least one kind of structure selected from structures obtained by esterifying a part or all of the carboxyl group or the carboxylic acid or the acetic anhydride structure is introduced into said copolymer.


14. (Currently Amended) The nonaqueous electrolyte battery according to claim 12, ~~18, wherein at least one kind of material selected from the group consisting of the ester maleic acid, the maleate and the maleic anhydride~~ the vinylidene fluoride is polymerized with vinylidene fluoride so as to locate the carboxyl moiety containing monomer unit ratio with a relative to vinylidene fluoride ratio within a range of 25/10000 to 30/1000.

15. (Canceled)

16. (Currently Amended) The nonaqueous electrolyte battery according to claim 8, ~~18,~~ wherein the molecular weight of said copolymer ranges from 0.8 dl/g to 3.0 dl/g on the basis of an intrinsic viscosity notation.

17. (New) A gel electrolyte comprising:  
a nonaqueous electrolyte solution comprising an electrolyte salt containing Li dissolved  
in a nonaqueous solvent, and  
a matrix polymer prepared by polymerizing monomers, the monomers comprising:  
vinylidene fluoride;  
hexafluoropropylene; and  
a carboxyl moiety containing monomer,  
wherein the matrix polymer is an ester, a carboxylic acid anhydride or both.

18. (New) A gel electrolyte comprising:  
an anode,  
a cathode,  
a nonaqueous electrolyte solution comprising an electrolyte salt containing Li dissolved  
in a nonaqueous solvent, and



a matrix polymer prepared by polymerizing monomers, the monomers comprising:

vinylidene fluoride;

hexafluoropropylene; and

a carboxyl moiety containing monomer.

wherein the matrix polymer is an ester, a carboxylic acid anhydride or both.

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